A. CLAIMS

I claim:

1. A method of increasing the solubility of 5 a protein of interest produced in a host cel/1 comprising expressing the protein as a fusion protein with a 14-3-3 protein.

The method of clasim 1 wherein the protein 10 of interest is selected from the group consisting of: extracellular domains of membrane bound receptor proteins, cytokines and cytokine/like proteins, neurotrophins, and metalloproteases.

cell is a prokaryotic cell

The method of claim 1 wherein the host

The method of claim 3 wherein the prokaryotic cell is a bacterial cell. 20

The method of claim 4 wherein the host cell is an E. coli/cell.

25 6. A method of increasing the solubility of a protein of interest produced in a host cell comprising expressing the protein as a fusion protein with a GF-14 polypeptide.

7. The method of claim 6 wherein the GF14 polypept/ide is GF-14R and is encoded by the nucleic acid mølecule of SEQ ID NO: 38.

The method of claim 6 wherein the fusion 35 protein contains a linker peptide.

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- 9. The method of claim 7 wherein the protein of interest is selected from the group consisting of: extracellular domains of membrane-bound receptor proteins, cytokines and cytokine-like proteins, neurotrophins, and metalloproteases.
- 10. The method of claim 7 wherein the host cell is a prokaryotic cell.
- 10 11. The method of claim 10 wherein the prokaryotic cell is a bacterial cell.
 - 12. The method of claim 11 wherein the host cell is an E. coli cell.
 - 13. An isolated and purified nucleic acid molecule comprising the sequence as set forth in SEQ ID NO: 38.
- 14. The nucleic acid molecule of claim 13 further comprising at its 5' or 3' end, a nucleic acid molecule selected from the group consisting of nucleic acid molecules encoding: an extracellular domain of a membrane-bound receptor protein, a cytokine or cytokine-like protein, a neurotrophin, and a metalloprotease.

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